

Title (en)
Force and location sensitive display

Title (de)
Kraft- und ortsempfindliche Anzeige

Title (fr)
Affichage tactile sensible à la pression et à l'emplacement

Publication
EP 1840714 B1 20170419 (EN)

Application
EP 07251121 A 20070316

Priority
• US 27808006 A 20060330
• US 38240206 A 20060509

Abstract (en)
[origin: EP1840714A1] A unit to provide both force and location detection includes a first transparent substrate (having first and second sets of conductive traces oriented in a first direction), a second transparent substrate (having a third set of conductive traces oriented in a second direction) and a plurality of deformable members (e.g ., rubber beads) arranged between the first and second transparent substrates. The first set of conductive traces, in combination with the conductive traces of the second transparent element, provide a capacitance signal representing where a user touches the display element. The second set of conductive traces, in combination with the conductive traces of the second transparent element, provide a capacitance signal representing the amount of force applied to the display element. When used with a display element (e.g. , a LCD or CRT), an input-output unit capable of both location sensing and force sensing operations is provided.

IPC 8 full level
G06F 3/041 (2006.01); **G06F 3/044** (2006.01)

CPC (source: EP US)
G06F 3/0414 (2013.01 - EP US); **G06F 3/0445** (2019.04 - EP US); **G06F 3/0447** (2019.04 - EP US)

Cited by
FR2925717A1; EP2241955A1; CN101673162A; EP2216708A3; CN102016769A; CN102473048A; EP2073108A1; US10006820B2; US10209830B2; US9874965B2; WO2009106737A1; WO2014149023A1; US8125466B2; US9886118B2; US10055048B2; US10120478B2; WO2009130381A1; WO2011006680A3; US10133418B2; US10444091B2; US10936128B2; US10782818B2; US11340725B2; US11474645B2; US9612170B2; US10088937B2; US10139294B2; US9665200B2; US9983715B2; US10309846B2; US10423265B2; US8830180B2; US9322633B2; US9823784B2; US9952703B2; US10088960B2; US10275068B2; US10496212B2

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